Nov. 26, 1935. E. L. J. MARTEL 2,022,214

EXPANDING SUPPORT FOR CASTING CORES

Filed March 27, 1934

Fig. 1

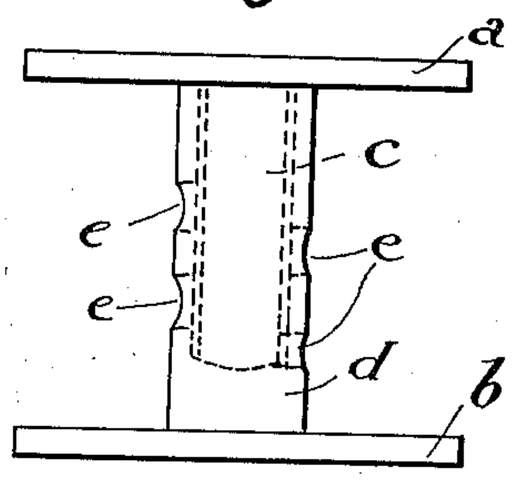


Fig. 2

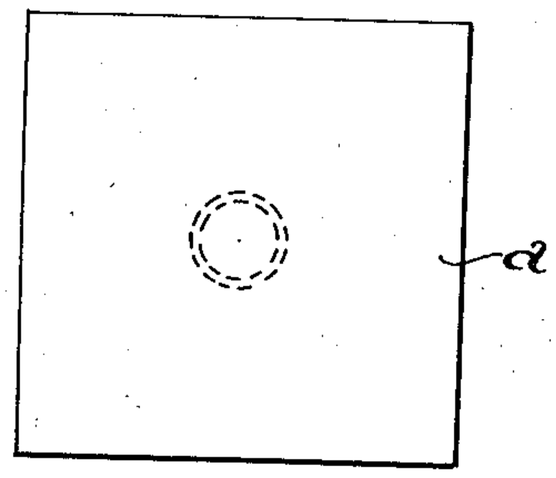


Fig. 4

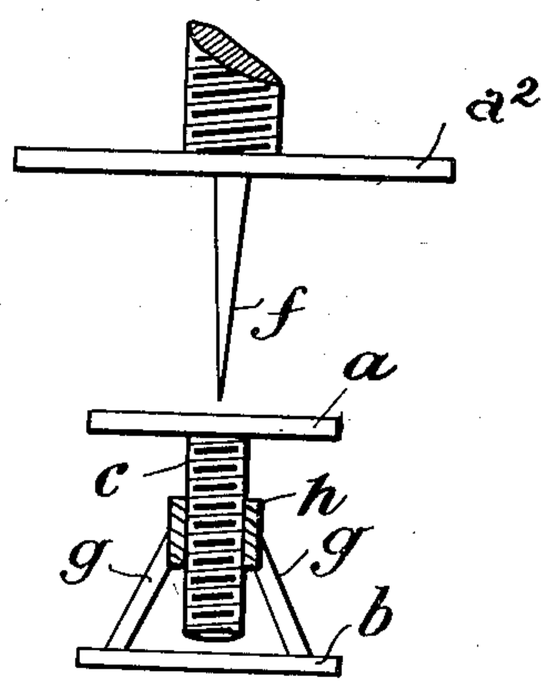


Fig. 5

Fig. 3

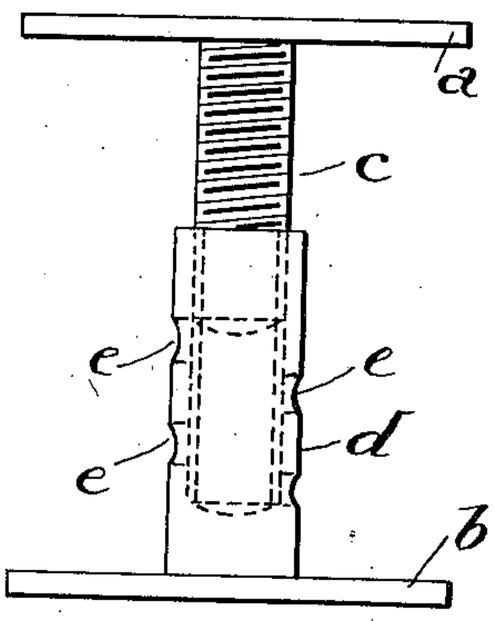
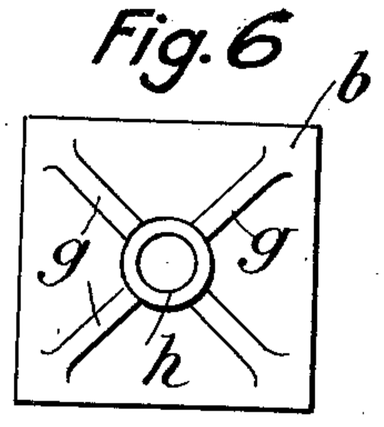


Fig. 6



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EXPANDING SUPPORT FOR CASTING CORES

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2 Claims. (Cl. 22—184)

This invention relates to adjustable supports or chaplets for use in foundry work for supporting the core and like purposes.

It is the object of the invention to provide certain improvements in such supports, and in particular to avoid the danger of having air pockets or hollows in parts of the supports embodied in the casting.

Embodiments of the invention whereby this object is attained are shown, by way of example, on the accompanying drawing, whereon:—

Fig. 1 is an elevation of an expansible support made according to the invention, at its minimum height.

Fig. 2 is a plan view corresponding to Fig. 1.

Fig. 3 shows the support in the position of use.

Fig. 4 shows a modified form of the support.

Fig. 5 is an elevation, partly in section, of another modified form of the support, and

Fig. 6 is a plan view of the lower part of the support shown in Fig. 5.

As shown in Figs. 1 and 2, the support consists of two shoes or plates *a*, *b* of which one carries a screwed shaft or stem *c*, and the other a socket or sleeve *d* into which the said shaft is threaded. The socket is provided with side recesses *e* allowing the metal, when the same is cast or run in, to fill the empty space which exists under the shaft or stem *c* when it is partially unscrewed. On one of the plates can be engraved the indication of the minimum and maximum sizes for which the support may be used. Said use takes place as follows:

Assuming the part to be cast to consist, for instance, of an entirely recessed frame showing quite varying thicknesses and the openings of which are not of sufficient size to allow of supporting or suspending the cores, the moulder proceeds in the usual manner, by placing "patches" of clay at the places he finds it necessary to put supports for the core. He then provisionally puts in position the core which bears upon the "patches", thereby imparting to the latter the required thickness. The moulder finally removes the core and, while taking an expansible support for every "patch" he brings the same to a height equal to the thickness of the latter in conveniently unscrewing the shaft or stem *c*. He thus obtains a perfectly adequate result within the minimum of time and without it being possible for a distortion, capable of determining a lack of stability, to take place, as such is the case with the supports as commonly used. The moulder proceeds in the same way as regards the supports adapted to be interposed between core and the other walls of the mould.

In the case where the support is to be secured to a vertical or inclined wall of the mould, one of the shoes or plates a_2 (Fig. 4) is advantageously provided with a point or taper *f* which allows the same to be driven into the said wall. This part can also be placed at places of difficult access, thus doing away with many troubles encountered when proceeding to delicate remouldings.

It is further possible to provide for the combination of a simple screw shaft or stem with two socket shoes or plates, similar to the shoe *b*.

According to the modification shown in Figures 5 and 6, the shoe or plate *b* is provided with feet *g* which support, at a suitable distance from the said shoe, an internally threaded socket or sleeve *h* into which the screw shaft *c* is threaded.

The various devices as above described are interchangeable, this making it possible to combine same at will.

It will be understood that the invention is not limited to the embodiments which have been described and which are shown by way of example, but that many modifications may be made thereto, both as regards the shape of shoes or plates and the other parts of the support and as regards their respective sizes.

I claim:—

1. An adjustable core-support comprising two shoes, a screw-threaded stem on one of said shoes, an internally screw-threaded socket and means for supporting said socket at a distance from the other shoe, said stem engaging said socket.

2. An adjustable core-support comprising two shoes, a screw-threaded stem on one of said shoes, feet on the other shoe, and an internally screw-threaded socket supported on said feet at a distance from said shoe, said stem engaging said socket.

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